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METHOD, SYSTEM AND COMPUTER PROGRAM PRODUCT FOR PORTABLE, INTERNET-ENABLED, PATIENT MONITORING SYSTEM

ABSTRACT OF THE DISCLOSURE

The present invention describes methods and apparatus useful in remotely modifying medical protocols by subgroups that are defined by specific database characteristics. In addition individual patient protocols may also be remotely modified. The method has application in medical databases containing the data collected by remote device monitoring of outpatients. These outpatients may be managed by one or more medical treatment or clinical research protocols or regimens involving pharmaceutical drugs, physiological data, educational content, and health status assessment or quality of life questionnaires. This method of mass customization of medical protocols, present in a medical database, is useful in efficiently monitoring and managing medical outpatients, through simultaneously instructing selected patient subgroups present in the database to make a change in their respective medical protocols. These changes are to be applied to all members of the selected medical subgroup; and in addition the method provides for specific patient instructions for the individualized components of the medical protocols. By using the mass customization method whereby subgroup selected changes are combined with individualized changes, both population management and individual patient management goals may be realized

The present invention further describes methods and apparatus useful in translating a complex medical treatment plan of a medical outpatient into a sequential series of automated, prompt and record events presented over time. In addition, individual patient medical treatment plans may be remotely created, modified, or viewed depending upon role-based assignments that permit different levels of access to and modification of the patient's time-and-event-driven medical treatment plan, depending upon the assigned role of the caregiver in the patient's treatment. The method has application in creating and linking medical databases containing data points that define the outpatient's medical treatment plan or protocol, with devices that can prompt the outpatient to carry out the sequential steps of a medical treatment plan, in proximity to the database, or while mobile at remote locations from the database.

This method facilitates converting a complex medical treatment plan into a series of simple steps presented by the remote prompting and monitoring device, to assist patients and their caregivers in proper health management. By using the real-time, time-and-event-driven method, individual patient management goals and improved patient treatment outcomes may be realized by outpatients with chronic and complex conditions.